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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY OR AGENT
07/349,669	05/10/89	JOHNSON	L. PC7008MB
			WITZ, J.
MERVIN E. BROKKE USDA-ARS-NORTHERN REGIONAL RES. CTR., 1815 NORTH UNIVERSITY STREET PEORIA, IL 61604			ART. DIR. PAPER NUMBER: 188 7 DATE MAILED: 11/20/90

This is a communication for a member in charge of the application to the COMMISSIONER OF PATENTS AND TRADEMARKS.

☐ This application has been examined ☒ Responsive to communication filed on 7/26/90 9/26/90 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 2 month(s), 20 days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 2-7 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 1 has been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 2-7 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Claims 2-7 are presented for examination. The amendments filed July 26, 1990 and September 26, 1990 have been received and entered.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2-8 are rejected under 35 U.S.C. 103 as being unpatentable over GB-2,145,112 in view of Lang for the reasons of record as set forth at pages 2-3 of the Office Action of March 28, 1990.

Applicant's arguments filed July 26, 1990 have been fully considered but they are not deemed to be persuasive.

Applicant's assertions that the fluorescent differential between X- and Y-bearing sperm disclosed in the Great Britain reference, i.e. 15%, and the statement found at page 4, lines 38-44 (which is quoted in the response) is sufficient to render the instant invention non-obvious are not persuasive. The cited reference is drawn to the sorting of living spermatozoa via the collection of sperm from a mammal, the staining of the sperm with a fluorescent dye, specifically Hoechst 33342, and passing the sperm through a detecting means and a cell sorting means which sorts the sperm based upon the fluorescent differential. Applicant has presented no evidence of record that the referenced method would not be work even in view of the disclosed

fluorescent differential which is expected due to the fact that applicant's method of sorting sperm is virtually identical to that disclosed by the Great Britain reference. The sole difference between the disclosed method and that claimed now rests with the temperature at which the sperm is incubated with the fluorescent dye. The claims now stipulate that the sperm should be incubated with the dye at a temperature of 30-39°C. The reference states that the sperm was incubated at room temperature. In the absence of a showing of unexpected result, the incubation of sperm at temperatures of 30-39°C is well within the skill of the practitioner such that, as sperm exists physiologically in the testis at temperatures around 35°C and in the vagina at temperatures around 37-38°C, it would have been obvious to one of ordinary skill in the art to incubate sperm at temperatures at which sperm exists physiologically. Even in view of such a showing, the temperature differential indicates only an improvement in the art of a known process and should therefore be claimed in Jepson format. Applicant's arguments with regard to the Lang reference are not well taken as the reference was used to show that sperm sorted with respect to sex chromosomes is conventionally used via artificial insemination to preselect the sex of offspring, regardless of the method of sorting.

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.


A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED

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UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jean C. Witz whose telephone number is (703) 308-3073. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



11/19/90



DOUGLAS W. ROBINSON
SUPERVISORY PATENT EXAMINER
GROUP 1/PD ART UNIT 188